Please amend the specification as follows:

Page 3, lines 16-24, please insert the following:

Thus, in the above-mentioned conventional techniques in the Japanese Patent Provisional Publications Nos. 07-208151 and 11-229848 11-229849, the deterioration of the NCx trap catalyst is diagnosed in accordance with NOx as an exhaust gas component to be removed. This strictly requires a high detection accuracy for the NOx sensor as a concentration detecting means, thereby making it difficult to judge the deterioration of the NOx trap catalyst or unavoidably permitting a large amount of NOx to be emitted with execution of the judgment of deterioration of the NOx trap catalyst.